743 366 [432] [438] The Public Health Department maintains a large base hospital at Saiho, 5 miles from Sivepe. A vegetable market at Saiho, originally established to supply the hospital, now serves a wider range of customers and at present is open every Thursday and Saturday (E. Waddell: personal communication). A few Sivepe people in our sample sell vegetables there regularly but seldom buy anything except lime (for chewing with betel nut). There are well-stocked trade stores at Saiho and Awala and a Savings Bank agency at Awala. In 1963 a trade store was established near Sasembata, by a member of Kongahambo village.

177 648 We could not complete this introductory sketch of local facilities and conditions without noting the traumatic experiences of the mountain Orokaiva during the life-span of the older men. Even an abbreviated description of local attitudes towards introduced economic and social changes such as we attempt later, would be inadequate unless it alluded to the likely deep impact of the following events.

First, the early government patrols, which encountered widespread opposition from the Orokaiva, were attacked most persistently by the 'Wasida' people who include the Sivepe villagers. Fighting was fierce and many of the old men we talked to had been close relatives killed or wounded.

Second, during World War II the paths of advance and retreat of Australian and Japanese troops crossed this area and the Orokaiva were 'drawn in as helpers, willingly or unwillingly, on both sides of the lines'.[1] [121] Some Orokaiva groups also became involved in intertribal skirmishes at this time - during our stay an imminent military exercise occasioned apprehensions among some Orokaiva about a possible resumption of dormant intertribal conflict at the time of the exercise.

Scattered for safety in the bush while the wartime campaigns swept the area, many people in the neighbourhood of Sivepe died of malnutrition. In addition, there was very thorough recruiting of local men for subsequent phases of the war elsehwere in the Territory. [101] In 1948 patrol staff reported that there was cause for concern in the continued decline in population.[2] At this

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[1] Keesing 1951:8. For an account of this episode see McCarthy 1959: Ch. 4, 10 ff., see esp. pp.110, 126n and maps pp.123, 357.

[464] [2] The war was said to have been a contributing factor; moreover, many villagers were employed as labourers on local European plantations and returned only at weekends; more important, the percentage of able-bodied males absent elsewhere as indentured labour had reached 31 and the officer accordingly recommended in 1948 that the area including Isoge, Isivita and Awala villages be closed to recruiting.

797 The majority of Papuan teachers remain unqualified teacher-evangelists although the mission is largely responsible for education in the sub-district at the primary, secondary and technical levels. A significant feature of their education programme as a whole remains its total disregard for agricultural training, except incidentally at the Martyrs' Memorial Secondary School where the pupils maintain a coffee garden as well as their own food gardens.[1]

[743] [657] Medical work has already formed a large part of the mission's activities and most mission stations operate a clinic and small hospital while a T.B. hospital is maintained at Embi. As with education, these activities are largely standardised by the Administration and the Department of Public Health is gradually taking over from the mission in this field.

(e) Recent developments in commercial agriculture

241 In 1941 a European planter obtained an agreement, under the Transactions with Natives Ordinance 1893-1935, to exploit the communal rubber plantations in the Awala area.[2] These had not previously been worked. Production commenced in 1943 and continues to date, interrupted only by the Mt Lamington eruption. However, the number of plantations incorporated in the scheme fell steadily and by 1965 only about 30 stands were being worked and tapping had become irregular. This is due partly to poor communications, partly to the fact that an agreement satisfactory to all parties was never arrived at and partly to the planter's own trees coming into full production.[3]

[245] The re-opening of Popondetta agricultural station in 1954 led to a renewal of interest in cash cropping with, in particular, the extensive planting of cocoa. By 1964 there were estimated to be 491,000 indigenous-owned coffee trees in the sub-district, 244,000 cocoa trees, 25,700 rubber trees (almost entirely the product of natural increase) and 108,000 coconut trees. This pattern of steadily increasing plantings only levelled off temporarily in 1959-60 with falling coffee prices, a shortage of coffee seed and inadequate marketing arrangements for cocoa. At the time labour

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[1] However, agricultural training at several levels has been available since 1955 at DASF's Popondetta Agricultural Station (now Popondetta Agricultural Training Institute).

[2] These had been established during the first world war in that part of the District considered too far inland for worthwhile copra production. There were 137 stands in all.

[3] For a detailed description see Rimoldi 1966:86-93.

station with Boru on the main road near Awala and passing within a mile of Sivepe, but it was not completed by the onset of the wet season. It was intended that this would be used by the OCGS and other purchasers of produce. This was the main reason for the Sivepe people's decision to move their village to a site within 200 yards of Sasembata mission station.

Sasembata mission is a head station of the Anglican mission. Among its facilities are a church, administered by an Orokaiva priest, a hospital and infant welfare clinic run by a Papuan medical orderly but supervised from the Administration hospital at Saiho, and a primary school with 400 children on the roll.[1] The school includes classes up to Standard V and is headed by an Australian with the assistance of ten Papuan teachers. A small trade store is operated by Oro Ltd at Kongohambo village adjoining the mission station.

Sivepe itself is laid out as a line village, with lineage members tending to occupy adjoining houses (see Map 4). The houses have a mean size of 229 sq ft and are built entirely of local materials, with the exception of nails which are now commonly used.

Three clan branches are represented in the village and two of these, the Jegase and Timumu clans,[2] comprised the survey sample (55.3 per cent of the total village population of 114 in January 1964), the characteristics of which reveal them to be representative of the population as a whole.[3]

The population of the sample declined by 20.6 per cent, from 63 to 50 persons, over the survey period. Ten of the 17 departures migrated to other villages and the rest sought wage employment within the district or in Port Moresby. This continuing out-migration intensified certain characteristics of the village's labour force, for by January 1965, 37.8 per cent of the potential adult male labour force was absent, the majority on a long-term basis in unskilled or semi-skilled work or low-ranking positions in government service.[4] In three cases, wives and children remained in the village and were supported by close kin. In January 1965, there were only two men remaining in the 20 to 34 years age groups.

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[1] An estimated 80 per cent of the children in the area receive some schooling.

[2] Clansmen also reside in twelve other villages, all within a radius of 3.7 miles of Sivepe.

[3] See Appendix 1 and Fig. 4:1.

[4] See Appendix 2.

Though most of the contacts between village people and the office-bearers arise out of official roles, the local priest, the assistant medical officer in charge of the Sasembata mission hospital, the mission teachers, the council's sanitary officer and others who lived near Sivepe, or temporarily stayed near Sivepe, tended to have at least one or two families with whom they were on mutual visiting terms and who regarded them as personal friends. At the same time, their relationship with many of the other Sivepe families remained definitely formal.

Contacts occurred almost always either in Sivepe or in a village nearby, on the initiative of the office-bearer (if the contact was official). Formal visits by councillors, sanitary inspector, coffee factory officers occurred about once monthly. Contacts with Church personnel occurred almost daily at the mission station, though formal calls by the priest or a teacher to Sivepe were made perhaps once a month, usually in connection with some quarrel that had arisen. The village was most active in its contacts with the mission hospital, several patients presenting themselves daily with minor ailments. Serious cases were often referred to Saiho hospital and most of the referred cases actually went to Saiho. There was a monthly visit from nurses dealing with infant health and expectant mothers; most of the mothers took their babies to be checked and weighed and no objections were made to preventive injections.

There were no cases, in Sivepe, of inter-marriage between local people and Papuans occupying these specialized roles, but in Inonda one man married the mission teacher's daughter. Otherwise, contacts of the type described in this section were sparser in Inonda, as the mission and medical establishment was at Hohota, three miles away, and on a far smaller scale. Inonda did have some direct contact with government over agricultural matters as one man expressed interest in entering an experimental scheme for growing beef cattle. He has adquate land and education, but the scheme had not gone beyond initial discussions by the time I left. Finally, Inonda had an arrangement with a Papuan who was a distant affine and who had a truck with which he took garden produce weekly from Inonda to the Embi hospital. The village people paid this man for his cartage. No comparable arrangement existed in Sivepe. Finally, contact with the officers of the Local Government Council seemed to me less frequent in Inonda than in Sivepe and to generate much less interest. This was no doubt due to rivalries between the village leader and the councillor, but also to a less keen interest in council objectives on the part of the majority of families.

The contacts described in this section, unlike the ones discussed earlier, do not characteristically occur in a kinship context. Hence, the contacts do not necessarily occur equally with all categories of members of the community, but when the problems have to do with land or politics or the conduct of village affairs, the married men are principally concerned; in educational matters

Section 3: Social Services: Health Assistance

657 Social services were provided partly by the government, partly by the council and partly by the mission. The services provided by the different organisations were so tightly interlinked and so systematically complemented one another that it will be convenient to present, in the present chapter, the overall system that was operating. This system was a product of government planning, while council and mission made specific contributions in their special areas of competence. In the next chapter, I shall look at these services again, from the viewpoint of general mission objectives.

657 In this interlocking of services, it was the government which met the bulk of the expenditure, as Table 13 clearly shows. On the 743 other hand, over Papua as a whole 60% of the hospitals were conducted by the missions and over one quarter of the aid posts. In the year 1964-1965, in the Northern District, the three administration hospitals had 3,671 admissions and 13,176 out-patients while the corresponding number for mission institutions was 3,286 admissions, 255,460 out-patients. It is therefore clear that the mission contribution to health services in the Territory is, in terms of patients treated, far greater than its budgetary contribution (2% of total expenditure on public health) would suggest. This disproportion is only slightly lessened if we consider the value of grants-in-aid and drugs supplied by the government to mission hospitals. Clearly, it costs a great deal less to treat a patient in a mission than in a government hospital.

743 The Saiho Hospital, which served all Orokaiva territory, was a sprawling settlement of a great many buildings, almost all made of [344] native materials. Only one building, as far as I remember, was in Australian style, with weatherboard walls; this contained the doctor's office, some other administrative offices, and was used for the few non-Papuan out-patients who occasionally called. The wards were all built of bush materials. Although the statistics show 2,500 admissions and 5,000 out-patients per year, there was only one physician at the hospital who at the same time functioned as superintendent and had a heavy administrative burden. He had a small expatriate administrative staff, and a few expatriate nurses. In the beginning of 1967, a second physician, a Papuan woman, joined the staff. The superintendent was also in charge of the training of aid post orderlies. Increasingly, Papuan nurses, trained in a three-year course at Port Moresby, are being used. A substantial number of hospital orderlies are employed.

758 It is not the policy of the hospital to offer ambulance services, 743 so that the village people are expected to make stretchers out of bush materials and carry in their sick. In practise, hospital and administration vehicles will frequently carry sick people to hospital and I have never actually seen the stretchers made. People would certainly know how to do it. Upon arrival, the sick person is interviewed by a hospital orderly; usually he is accompanied by a number of

A [See Cat. 116, p. 218--Analyst]

758 relatives who answer questions if he is too sick. The orderly speaks
743 the Orokaiva language; the interview gives most of the information an examining physician would require, so that the language barrier between the patient and the Australian physician poses no essential problem. Orderlies can, in any case, act as interpreters. This interview is conducted without much delay and the physician is usually able to see patients fairly promptly. The relatives meanwhile stay around to hear the news; sometimes they leave the patient and go back to their village, but often they stay around the hospital as long as the patient is there.

The hospital does not normally supply patients' food. This simplifies the operation; the patients' diet will in any case consist almost solely of taro. There is usually a relative around Saiho who will cook and take food to a patient. While this may seem an unduly casual procedure, it is valuable in relieving the tension of the patient as well as the relatives. If the complaint diagnosed by the physician requires major surgery or the attention of a specialist, the patient is flown to Port Moresby at government expense. I have seen this done several times and always rather promptly. The Port Moresby hospital is a modern well-equipped institution. Admission to hospital is free to Papuans.

A minor racial upset resulted from the circumstance that the medical officer in charge of the Northern District was a Papuan whereas the superintendent of the hospital was an Australian. It arose because theexpatriates, objecting to being treated by a Papuan physician, insisted upon being attended by the superintendent. The latter, placing professional esprit de corps above expatriate solidarity, would not allow the medical officer to be bypassed much to the chagrin of the planters (the public servants and missionaries did not seem to be too troubled). In an earlier chapter, I have commented on the unusually good relations between the superintendent and the Papuans.

Though Sivepe depended on the Saiho hospital for serious illness, minor accidents, malaria, dysentery, various other stomach ailments, skin troubles, etc. were treated at the small mission hospital in Sasembata. This hospital was lucky to have a competent assistant medical officer in charge in 1966. In earlier days, just after the eruption, the hospital was conducted by an Australian nurse and it was only since 1965 that Papuan assistant medical officers began to graduate and to be available for work in places such as Sasembata. I have already mentioned that the people were genuinely pleased at the improvement in service and expressed their pleasure by building a new hospital. This was constructed out of bush materials, contained about 12 beds also made of bush materials, and was equipped with a small selection of basic drugs supplied by Saiho hospital.

Whereas Saiho hospital was conducted by the government, Sasembata hospital was a mission responsibility. The Sasembata staff was paid at mission rates, far lower than the government rates. For instance, the assistant medical officer received $11 per month, whereas the

756 743 government scale in 1965 was $1000-$1800, per annum. The orderlies assisting the AMO received $1 per month. This did not necessarily mean that the AMO lacked the qualifications to get a government job; he could easily have obtained one.

Every day some dozens of people would present themselves with minor and sometimes major ailments. They would be bandaged, given a pill or some other simple treatment. Very sick cases were referred to the hospital; most days, a car would come to the mission station and the AMO could get transport for his patients. The beds were occupied for the more serious cases who could not well go home but who did not need the more specialised treatment of Saiho. The nursing aid never stayed in the hospital overnight but one or two relatives of the patient usually did; if the patient's condition deteriorated, the AMO could always be called over as he lived on the mission station. (See Map XI.)A

743 [344] Inonda was served by one of the medical aid posts which are being built all over the district. This was at Hohota, next to the mission school. Such aid posts are built of milled timber and paid for by the Ngaturu Council; the government may subsidize these posts. The salary of the aid post orderlies, who work on a part time basis, is paid by the Council also, but in 1966, the government paid a 50% subsidy on these. Most of the large resettlement villages (Hohorita, Koipa, Kiorota, etc.) had them, or were getting them, three posts being added in the year 1966. The smaller villages had to share aid posts; thus, there were no plans to build one at Inonda, and people were expected to walk the three miles to Hohota for treatment.

758 743 The standard of aid was not always as high at these posts as it was in Sasembata. Hohorita had much trouble replacing an orderly who had left. Inonda found it difficult to get service; on one occasion when we went to the aid post, we heard, upon arrival that the orderly had just gone to town for the day. On another occasion, he was in his house; he had been hunting, was tired and would not see anybody. This would have been a rare occurrence indeed at Sasembata. The orderlies regarded themselves as part-time employees who chose their own working hours. This would have been reasonable (for average cases) were it not for the distance between Inonda and Hohota. How often will a man walk six miles to collect a single malaria pill? A more serious problem is that the orderlies are not nearly as well trained as the AMO; hence, they can hardly be expected to carry out diagnosis.

755 People were greatly taken with the medical services available; they were not a replacement but an addition to traditional magical practises. When my interpreter was sick he was very pleased to swallow the pills I gave him, but his house was full nonetheless with numerous herbs collected for his complaint and these were being boiled in a pot or otherwise ingested simultaneously with my medicine. The Orokaiva view is that medicine, given for the purpose of curing, will be effective if it is stronger than the sorcerer causing the illness. It has been noticed that this is sometimes the case with Western

A [See Cat. 116, p. End Map 10--Analyst]

755 medicine, though by no means always. Bandages were especially popular;
they were worn as status symbols and as dancing ornaments. Nurses and
752 physicians are regarded with affection; any person who obviously wants
554 to be helpful would be treated thus, and it has of course been noticed
that they relieve a great deal of discomfort even though Western
theories of the causation of disease are treated sceptically and mostly
753 explained away because the nurses and physicians usually do not under-
stand the fine points of sorcery; only the Orokaiva have this knowledge.

Data on the eruption period do not suggest that the attitude
731 to medicine was different then to what it is today. There were,
743 however, fewer facilities: the hospitals were smaller, there was
less available transport to reach them with, the chain of aid posts
built by the Higaturu Council did not yet exist, so that outside the
government hospital, the only facilities were the mission stations.

The evacuation camps provided a good opportunity to put a
744 public health programme into operation, and this opportunity was taken.
No regular anti-malarial preventive treatment was given because this
clearly could not have been continued after the camps were closed--
and it was feared that anti-malarials might lower natural resistance.
On the other hand, everyone at Ilimo was given prophylactic treatment
against hookworm. Unfortunately, this medicine had the effect of
"making people feel a little drunk." One man, the sole male survivor
of a large family killed during the eruption, went berserk through the
medicine and caused a near riot. Mr. Kaad then abandoned his campaign
against hookworm at Ilimo, reviving it later, in the Saiho period.
Prophylactic treatment against hookworm has not been continued because
reinfection constantly occurs. The camps provided a practical object
lesson on the Western ideas of treating waste matters, sanitation and
water supplies, a lesson which no doubt bore fruit some years later,
when the Higaturu Council had money and an ideological base for bringing
[242] about such innovations. Finally, the introduction of sweet potatoes
[146] at Ilimo, by means of distribution of sample tubers and seeds and the
teaching of methods of cultivation, had a definite public health
objective: it was done because the yellow and red varieties of sweet
potato are particularly rich in vitamins in which Orokaiva diet is
supposed to be often deficient. Today, some of this sweet potato is
grown in Sivepe, though on a small scale, while plantings in Inonda
are somewhat more extensive. (The sweet potatoes resist drought better
than taro.)

The most active public health programmes I saw in 1966-67
were directed at: malaria control, infant health, village hygiene.
The key figure in public health improvement at Sivepe was the health
inspector employed by the Higaturu Coincil. This man was expected to
cover the whole of the Council area, and spent much of his time
touring villages. As his home was at Garombi and he had many relatives
in Sivepe, he made frequent visits. Sivepe caused him little trouble,
he told me, as waste matter was thrown into deep holes, everyone had
a lavatory and the place was kept clean in the prescribed way. On